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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,924	02/14/2002	Taisuke Akahori	018987-037	6385

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EXAMINER	
BAKER, CHARLOTTE M	
ART UNIT	**PAPER NUMBER**
2626	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/073,924	AKAHORI ET AL.	
	Examiner	Art Unit	
	Charlotte M. Baker	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 14 February 2002 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 03/19/2002.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because ln. 9, replace "*an isolated pixel" with --an isolated pixel--. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: p. 20, par. 60, replace "should be note" with --should be noted--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawai et al. (6,449,060).

Regarding claim 1: Kawai et al. disclose an acquisition unit (Fig. 1, color image input unit 101) for acquiring image data that includes a plurality of pixels; a first-judgment unit (Fig. 1, character/halftone image determination unit 111) for setting each of the plurality of pixels as a first target pixel (pixel of interest) and performing a first-judgment as to whether the first target pixel is an isolated pixel for a judgment of a halftone-dot area (col. 7, ln. 39-47); a first-judgment result correction unit (Fig. 1, spatial filter coefficient storage unit 112) for correcting results of the first-judgment (Fig. 1, character/halftone image determination unit 111), to determine

isolated pixels to be used in a second-judgment (col. 7, ln. 48-58); and a second-judgment unit (Fig. 1, edge emphasis amount extraction unit 113) for setting each of the plurality of pixels as a second target pixel and performing the second-judgment as to whether the second target pixel is in a halftone-dot area (col. 7, ln. 52-58), by referring to the corrected results of the first-judgment (col. 7, ln. 52-58).

Regarding claim 2: Kawai et al. satisfy all the elements of claim 1. Kawai et al. further disclose wherein the second-judgment unit (Fig. 1, edge emphasis amount extraction unit 113) counts a number of isolated pixels determined to be used in the second-judgment (Fig. 2), in a predetermined area including the second target pixel (col. 7, ln. 52-58), by referring to the corrected results of the first-judgment (Fig. 1, character/halftone image determination unit 111), and compares the count number (Fig. 2) and a predetermined threshold (col. 7, ln. 52-58), to judge whether the second target pixel is in a halftone-dot area (col. 7, ln. 52-58).

Regarding claim 3: Kawai et al. satisfy all the elements of claim 1. Kawai et al. further disclose wherein the first-judgment result correction unit (Fig. 1, spatial filter coefficient storage unit 112) corrects a result of the first-judgment relating to the first target pixel (col. 7, ln. 48-58), by referring to results of the first-judgment relating to a plurality of pixels present at predetermined positions with respect to the first target pixel (Fig. 2 and col. 7, ln. 48-63).

Regarding claim 4: Kawai et al. satisfy all the elements of claim 3. Kawai et al. further disclose wherein when the first-judgment unit (Fig. 1, character/halftone image determination unit 111) judges that a plurality of pixels positioned in a group are isolated pixels (col. 7, ln. 39-47), the first-judgment result correction unit (Fig. 1, spatial filter coefficient storage unit 112) performs such correction processing that decreases a number of isolated pixels to be used in the

second-judgment (selects either character or halftone filtering and thus decreases number of isolated pixels, col. 7, ln. 48-58).

Regarding claim 5: Kawai et al. satisfy all the elements of claim 1. Kawai et al. further disclose wherein the first-judgment result correction unit (Fig. 1, spatial filter coefficient storage unit 112) includes a filter with a predetermined pattern that is used when correcting the results of the first-judgment (col. 7, ln. 48-58).

Regarding claim 6: Kawai et al. satisfy all the elements of claim 1. Kawai et al. further disclose an image correction unit (Fig. 1, color correction unit 107) for correcting the image data, in accordance with results of the second-judgment (Fig. 1).

Regarding claim 7: Kawai et al. satisfy all the elements of claim 6. Kawai et al. further disclose wherein when the second-judgment unit (Fig. 1, edge emphasis amount extraction unit 113) judges that the second target pixel is in a halftone-dot area (col. 7, ln. 52-58), the image correction unit (Fig. 1, color correction unit 107) performs, on the second target pixel, image correction processing suitable for a pixel in a halftone-dot area (based upon spatial filter coefficient storage unit 112 output, the process follows to color correction unit 107 as shown in Fig. 1).

Regarding claim 8: Kawai et al. satisfy all the elements of claim 6. Kawai et al. further disclose a halftone-dot area extension unit (Fig. 1, edge emphasis amount distribution unit 116) for extending a halftone-dot area that is composed of pixels whose judgment results of the second-judgment unit (Fig. 1, edge emphasis amount extraction unit 113) unit are affirmative (col. 8, ln. 56-63), wherein the image correction unit (Fig. 1, color correction unit 107) corrects a part of the image data that corresponds to the halftone-dot area (col. 8, ln. 48-52 and Fig. 1,

output of edge emphasis amount extraction unit 113 is sent to edge emphasis amount distribution unit 116) extended by the halftone-dot area extension unit (col. 13, ln. 37-56).

Regarding claim 9: Arguments analogous to those stated in the rejections of claim 1 and claim 6 are applicable. In addition, Kawai et al. disclose an image forming unit (Fig. 1, color image output unit 110) for forming an image based on the image data corrected by the image correction unit (Fig. 1, color correction unit 107).

Regarding claim 10: The structural elements of apparatus claim 1 perform all of the steps of method claim 10. Thus, claim 10 is rejected for the same reasons discussed in the rejection of claim 1.

Regarding claim 11: Kawai et al. satisfy all the elements of claim 10. The structural elements of apparatus claim 3 perform all of the steps of method claim 11. Thus, claim 11 is rejected for the same reasons discussed in the rejection of claim 3.

Regarding claim 12: Kawai et al. satisfy all the elements of claim 10. The structural elements of apparatus claim 6 perform all of the steps of method claim 12. Thus, claim 12 is rejected for the same reasons discussed in the rejection of claim 6.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMB

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER